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TITLE : PHOSPHOR AND FLUORESCENT DISPLAY DEVICE

ABSTRACT : PROBLEM TO BE SOLVED: To provide a lemon luminescent color without being accompanied by deterioration of a cathode by constituting a phosphor which emits a light by the collision with a low accelerating electrode by a ZnO:Zn phosphor and a (Zn,Mg)O-based phosphor.

SOLUTION: A light emitting part of a display part is formed of a phosphor obtained by mixing a ZnO:Zn phosphor having green luminescent color and a (Zn,Mg)O-based phosphor having yellow luminescent color in a ratio according to a desired tone, which emits lemon luminescent light. As the (Zn,Mg) O-based phosphor, a $(Zn_{1-x},Mg_x)O$:Zn phosphor using Zn as an activator is used, wherein Li may be used as the activator ($0<x\leq0.25$). Since no sulfide phosphor is used, scattering of sulfur by electron irradiation is eliminated. To the phosphor, WO_3 for improving high-temperature leaving characteristic or In_2O_3 for suppressing the charge-up of a pigment by electron collision is preferably added. The lemon color characteristic can be enhanced by the formation of a yellow light transmitting filter on the display surface or the addition of a yellow coating material to the light emitting part.

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